

SEQUENCE LISTING

PTO/PCT Rec'd 15 AUG 2001

<110> Rowe, James B.

Al Jassim, Rafat A

<120> Control of Acidosis

<130> 01-179

<140> 09/786253

<141> 2000-07-03

<150> PCT/AU00/00805

<151> 1999-07-02

<160> 13

<170> PatentIn Ver. 2.0

<210> 1

<211> 1470

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
vitulinus

<220>

<221> misc_feature

<222> (21)

<223> n is unknown

<400> 1

gacgaacgct ggcggcgtgc ntaatacatg caagtagaac gctgaagact ttagcttgct 60
aaagtggaa gagttgcga cgggtgagta acgcgtaggt aacctgccta ctagcggggg 120
ataactattg gaaacgatag ctaataccgc ataacagcat ttaacacatg ttagatgctt 180
gaaaggagca attgcttcac tagtagatgg acctgcgttg tattagctag ttggtgaggt 240
aacggctcac caaggcgacg atacatagcc gacctgagag ggtgatcggc cacactggga 300
ctgagacacg gccagactc ctacgggagg cagcagtagg gaatcttcg caatgggggc 360
aaccctgacc gagcaacgcc gcgtgagtga agaaggtttt cggatcgtaa agctctgttg 420
taagagaaga acgtgtgtga gagggtgaaag ttcacacagt gacggtaact taccagaaaag 480
ggacggctaa ctacgtgccg gcagccgcgg taatacgtag gtcccagagc ttgtccggat 540
ttattgggcg taaagcgagc gcaggcggtt taataagtct gaagttaaag gcagtggcct 600
aaccattgtt cgctttggaa actgttagac ttgagtgcag aaggggagag tgggaattcca 660
tgtgtagcgg tgaaatgcgt agatatatgg aggaacaccg gtggcgaaaag cggtctctctg 720
gtctgtaact gacgtgagg ctcgaaagcg tggggagcaa acaggattag ataccctggt 780
agtccacgcc gtaaacgatg agtgctaggt gttaggccct ttccggggct tagtgccgca 840

gctaacgcat taagcactcc gcctggggag tacgaccgca aggttgaaac tcaaaggaat 900
 tgacgggggc ccgcacaagc ggtggagcat gtggtttaat tcgaagcaac gcgaagaacc 960
 ttaccaggtc ttgacatccc gatgctattc ctagagatag gaagtttctt cggaacatcg 1020
 gtgacagggtg gtgcatgggt gtcgtcagct cgtgtcgtga gatgttgggt taagtcccg 1080
 aacgagcgca acccctattg ttagttgcca tcattaagtt gggcactcta gcgagactgc 1140
 cggtaataaa ccggaggaag gtggggatga cgtcaaata tcatgcccct tatgacctgg 1200
 gctacacacg tgctacaatg gttggtacaa cgagtcgcga gtcggtgacg gcaagcaa 1260
 ctcttaaagc caatctcagt tcggattgta ggctgcaact cgcctacatg aagtcggaat 1320
 cgctagtaat cgcgatcag caccgcgcg tgaatacgtt cccgggcctt gtacacaccg 1380
 cccgtcacac cagcagagtt tgtaacacc gaagtcggtg aggtaacctt ttggagccag 1440
 ccgcctaagg tgggatagat gattgggggt 1470

<210> 2

<211> 666

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
 vitulinus

<400> 2

ccggatttat tgggcgtaaa gcgagcgag gcggtttaat aagtctgaag ttaaaggcag 60
 tggtttaacc attgttcgct ttggaaactg ttagacttga gtgcagaagg ggagagtgga 120
 attccatgtg tagcgggtgaa atgcgtagat atatggagga acaccgggtg cgaaagcggc 180
 tctctggtct gtaactgacg ctgaggctcg aaagcgtggg gagcaaacag gattagatac 240
 cctggtagtc caccgcgtaa acgatgagtg ctaggtgtta ggcctttcc ggggcttagt 300
 gccgcagcta acgcattaag cactccgcct ggggagtagc accgcaagg tgaactcaa 360
 aggaattgac gggggcccg acaagcgggt gagcatgtgg tttaattcga agcaacgcga 420
 agaaccctac caggtcttga catcccgatg ctatttctag agataggaag tttcttcgga 480
 acatcgggtg caggtggtgc atggtgtcgc tcagctcgtg tcgtgagatg ttgggttaag 540
 tcccgcacag agcgcaaccc ctattgttag ttgccatcat taagttgggc actctagcga 600
 gactgccggt aataaaccgg aggaagggtg ggatgacgtc aaatcatcat gcccttatg 660
 acctgg 666

<210> 3

<211> 662

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
 vitulinus

<400> 3

atttattggg cgtaaagcga gcgcaggcgg ttttaataagt ctgaagttaa aggcagtggc 60
 ttaaccattg ttcgctttgg aaactgttag acttgagtgc agaaggggag agtggaattc 120
 catgtgtagc ggtgaaatgc gtagatatat ggaggaacac cgggtggcgaa agcggctctc 180

tgggtctgtaa ctgacgctga ggctcgaaag cgtggggagc aaacaggatt agataccctg 240
 gtagtccacg ccgtaaacga tgagtgctag gtgttaggcc ctttccgggg cttagtgccg 300
 cagctaacgc attaaagcact ccgcctgggg agtacgaccg caagggtgaa actcaaagga 360
 attgacgggg gcccgcacaa gcggtggagc atgtggttta attcgaagca acgcgaagaa 420
 ccttaccagg tcttgacatc ccgatgctat ttctagagat aggaagtttc ttcggaacat 480
 cgggtgacagg tgggtgcatgg ttgtcgtcag ctcgtgctgt gagatgttgg gttaagtccc 540
 gcaacgagcg caacccttat tgttagttgc catcattaag ttgggcactc tagcgagact 600
 gccggtaata aaccggagga aggtggggat gacgtcaaat catcatgccc cttatgacct 660
 gg 662

<210> 4

<211> 1451

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
vitulinus

<400> 4

gatgaacgct ggcggcgtgc ctaatacatg caagtcgaac gggaatcttc ggattccagt 60
 ggcgaacggg tgaggaatac ataggtaacc tgcccctccg agggggacaa cagacggaaa 120
 catctgctaa gaccgcatag ccacaggga ggcattcttc ctgtgcaaaa tgtcctttcg 180
 gggacagcgg ggggatggac ctatgccgca ttagctgggt ggcggggcaa cggcccacca 240
 aggcgacgat gcgtagccgg cctgagaggg cggacggcca cactgggact gagacacggc 300
 ccagactcct acgggaggca gcagtaggga attttcggca atgggggaaa ccctgaccga 360
 gcaacgcgc gtgaacgatg aaggccttcg ggtcgtaaag ttctgttgcg aaggaagaac 420
 gccggtgtca ggaaatgggc gccgggtgac ggtacttcgc atagaaagcc acggctaact 480
 acgtgccagc agccgcggta atacgtaggt ggcgagcgtt atccggaatc attgggcgta 540
 aagagggagc aggcggcgat acaggtctgt ggtgaaattc cgaagctaaa cttcggccag 600
 ccaaagaaac cggatcgcta gagtgcggaa gaggatcgtg gaattccatg tgtagcgggtg 660
 aaatgcgtag atatatggag gaacaccagt ggcaaggcg acggtctggg ccgcaactga 720
 cgctcattcc cgaaagcgtg gggagcaaat aggattagat accctagtag tccacgccgt 780
 aaacgatcga tactaagtgt cgggggtcaa acctcggtgc tggagtcaac gcaataagta 840
 tcgcgcctga gtagtacgtt cgcaagaatg aaactcaaag gaattgacgg gggcccgcac 900
 aagcggtgga gcatgtgggt taattcgaag caacgcgaag aaccttacca ggtcttgaca 960
 tcgatccaaa agggacggag acgtcccat agctatggag aagacagggt gtgcatgggt 1020
 gtcgtcagct cgtgtcgtga gatgttgggt taagtccgc aacgagcgca acccctgtcg 1080
 ccagttgccg gcatagagtt ggggactctg gcgagactgc ctctgcaagg aggaggaagg 1140
 cggggatgac gtcaaactat catgcccctt atgacctggg ccacacacgt gctacaatgg 1200
 acggagcaga gggaagcgaa gcggcgacgc caagcggatc ccagaaacc gttctcagtt 1260
 cggactgcag tctgcaactc gactgcacga agctggaatc gctagtaatc gcggatcagc 1320
 atgccgcggt gaatacgttc tcgggccttg tacacaccgc ccgtcacacc atgagagtcg 1380
 gcaacacccg aagccggtgg ctcaaccct cggggagggg gctgtctaag gtggggccga 1440
 tgattggggg g 1451

<210> 5

<211> 1451

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
vitulinus

<400> 5

```

gatgaacgct ggcggcgctgc ctaatacatg caagtcgaac gggaatcttc ggattccagt 60
ggcgaacggg tgaggaatac ataggtacc tgcccctccg aggggggaaa cagacggaaa 120
catctgctaa gaccgcatag ccacagggaa ggcatcttcc ctgtgccaaa tgtcctttcg 180
gggacagcgg ggggatggac ctatgccgca ttagctggtt ggcggggcaa cggcccacca 240
aggcgacgat gcgtagccgg cctgagaggg cggacggcca cactgggact gagacacggc 300
ccagactcct acgggaggca gcagtaggga attttcggca atgggggaaa ccctgaccga 360
gcaacgccgc gtgaacgatg aaggccttcg ggtcgtaaag ttctgttgcg aaggaagaac 420
gccggtgtca ggaaatgggc gccgggtgac ggtacttcgc atagaaagcc acggctaact 480
acgtgccagc agccgcggta atacgtaggt ggcgagcgtt atccggaatc attgggcgta 540
aagagggagc aggcggcgat acaggtctgt ggtgaaattc cgaagctaaa cttcggccag 600
ccaaagaaac cggatcgcta gagtgcggaa gaggatcgtg gaattccatg tgtagcggtg 660
aaatgcgtag atatatggag gaacaccagt ggcgaaggcg acggtctggg ccgcaactga 720
cgctcattcc cgaaagcgtg gggagcaaat aggattagat accctagtag tccacgccgt 780
aaacgatcga tactaagtgt cgggggtcaa acctcggcgc tggagtcaac gcaataagta 840
tcgcgcctga gtagtacgtt cgcaagaatg aaactcaaag gaattgacgg gggcccgcac 900
aagcggtgga gcatgtggtt taattcgaag caacgcgaag aaccttacca ggtcttgaca 960
tcgatccaaa agggacggag acgtcccat agctatggag aagacaggtg gtgcatggtt 1020
gtcgtcagct cgtgtcgtga gatgttgggt taagtccgc aacgagcgca acccctgtcg 1080
ccagttgcca gcattgagtt ggggactctg gcgagactgc ctctgcaagg aggaggaagg 1140
cggggatgac gtcaaactcat catgcccctt atgacctggg ccacacacgt gctacaatgg 1200
acggagcaga gggaagcgaa gcggcgacgc caagcggatc ccagaaacc gttctcagtt 1260
cggactgcag tctgcaactc gactgcacga agctggaatc gctagtaatc gcggatcagc 1320
atgccgcggt gaatacgttc tcgggccttg tacacaccgc ccgtcacacc atgagagtcg 1380
gcaacacccg aagccgggtg ctcaaccct cggggaggga gctgtctaag gtggggccga 1440
tgattggggt g                                     1451

```

<210> 6

<211> 1483

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
vitulinus

<400> 6

```

gacgaacgct ggcggcgctgc ttaacacatg caagtcgaac gaggygattt waagcttgct 60
tagatgagtc gagtggcaaa cgggtgagta acgcgtagac aacctgccgc aaagatgggg 120
acaacagtcc gaaaggactg ctaataccga atgttgtcag attcccgcat gggagactga 180
ttaaagatgg cctctacttg taagctatcg ctttgcatg ggtctgcgtc tgattagcta 240

```

```

gttgggtggg taacggccta ccaaggcgac gatcagtagc cggctctgaga ggatgaacgg 300
ccacattgga actgagacac ggtccagact cctacgggag gcagcagtg ggaatcttcc 360
gcaatgggcg aaagcctgac ggagcaacgc cgcgtgagtg aagaaggggt tcggctcgta 420
aagctctgtt gacggggacg aacgtgagc atgcgaatag tttcttgcaa tgacgggtacc 480
cgctcaggaa gccacggcta actacgtgcc agcagccgcg gtaatacgtg ggtggcgagc 540
gttgtccgga attattgggc gtaaaggag cgcaggcggg aaggcaagtc agtcttaaaa 600
gtgcggggct caaccccggt atgggattga aactgtcttt cttgagtgc ggagaggaaa 660
gcggaattcc tagttagcgc gtgaaatgcg tagatattag gaggaacacc agtggcgag 720
gcggtcttct ggactgtaac tgacgtgag gctcgaaagc gtggggagcg aacaggatta 780
gataccctgg tagtccacgc cgtaaacgat gaatgctagg ttaggaggt atcgaccct 840
tctgtgccgg agttaacgca ataagcattc cgctgggga gtacggtcgc aagactgaaa 900
ctcaaaggaa ttgacggggg ccgcacaag cggaggagta tgtggtttta ttcgacgcaa 960
cgcaagaac cttaccaggg cttgacattg agtgaaaggc ctagagattg gtccctctct 1020
tcggagacac gaaaacaggt ggtgcatggc tgcgtcagc tcgtgtcgtg agatgttggg 1080
ttaagtcccg caacgagcgc aacccctatc atttgttgcc agcacgtcaa ggtgggaact 1140
caaatgagac tgccgcggac aacgcggagg aaggcgggga tgacgtcaag tcatcatgcc 1200
ccttatgtcc tgggctacac acgtactaca atgggatgga cagagagcag cgaccccgcg 1260
agggcaagcg aaccccataa accatctccc agttcggatt gcaggctgca acccgctgc 1320
atgaagtcgg aatcgctagt aatcgctggt cagcatacag cggatgaatac gttcccgggc 1380
cttgtagaca ccgcccgtca caccacggaa gtcattcaca cccgaagccg gtgggtaaac 1440
cgcaaggata tagccgtcta aggtgggggc gatgactggg gtg 1483

```

<210> 7

<211> 1000

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: Clostridium-like
vitulinus

<400> 7

```

cgaggaagcc acggctaact acgtgccagc agccgcggta atacgtaggt ggcgagcgtt 60
gtccggaatt attgggcgta aaggagcgc aggcgggaag gtaagtcggt cttaaaagt 120
cggggctcaa ccccgtagt ggatcgaaac tatctttctt gtagtcagga gaggaaagcg 180
gaattcctag ttagcgggtg aaatgcgtag atattaggag gaacaccagt ggcaaggcg 240
gctttctgga ctgtaactga cgctgaggct cgaaagcgtg gggagcgaac aggattagat 300
accctggtag tccacgccgt aaacgatgaa tgctaggtgt aggaggtatc gaccccttct 360
gtgccggagt taacgcaata agcattccgc ctggggagta cggtcgcaag actgaaactc 420
aaaggaattg acggggggcc gcacaagcgg tggagtatgt ggtttaattc gacgcaacgc 480
gaagaacctt accagggtt gacattgagt gaaagggcta gagatagctc cctctcttcg 540
gagacacgaa aacagggtgt gcatggctgt cgtcagctcg tgcgtgaga tgttgggtta 600
agtcccgcaa cgagcgcaac ccctatcttt tgttgccagc acgtcacggt gggaactcaa 660
aagagactgc cgcgacaac gcggaggaag gcggggatga cgtcaagtca tcatgcccct 720
tatgtcctgg gctacacacg tactacaatg ggatggacag agagcagcga acccgcgagg 780
gcaagcgaac ccataaacc atctcccagt tcggattgca ggctgcaact cgctgcatg 840
aagtcggaat cgctagtaat cgcaggtcag catactgcgg tgaatacgtt cccgggcctt 900
gtacacaccg cccgtcacac cacggaagtc attcacacc aaagccggtg gggtaacctt 960

```

cgggagccag ccgtctaagg tgggggcgat gactgggggtg

1000

<210> 8

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 27f primer

<400> 8

agagtttgat cctggctcag

20

<210> 9

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 1492r primer

<400> 9

ggttaccttg ttacgact

18

<210> 10

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 530f primer

<400> 10

gtgccagcmg ccgcgg

16

<210> 11

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 519r primer

<400> 11

gwattaccgc ggckgctg

18

<210> 12

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 907r primer

<400> 12

ccgtcaattc mtttragttt

20

<210> 13

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 926f primer

<400> 13

aaactyaaak gaattgacgg

20